Haier

HD Ready Digital LCD TV and
HD Ready Digital LCD TV/DVD Combi

USER'S MANUAL

Please read this manual carefully before using your television and keep this manual for future reference.

MODEL:
L15T11W-A,L15TA11W, L15T11W-C,
L15TC11W, L19T11W-A, L19TA11W,
L19T11W-C, L19TC11W, L22T11W-A,
L22TA11W, L22T11W-C, L22TC11W,
L15T12W-A,L15TA12W, L15T12W-C,
L15TC12W, L19T12W-A, L19TA12W,
L19T12W-C, L19TC12W, L22T12W-A,
L22TA12W, L22T12W-C, L22TC12W,
LT15T1W, LT19T1W, LT22T1W,
LT15T1BW, LT19T1BW, LT22T1BW,
LT15T1WW, LT19T1WW, LT22T1WW

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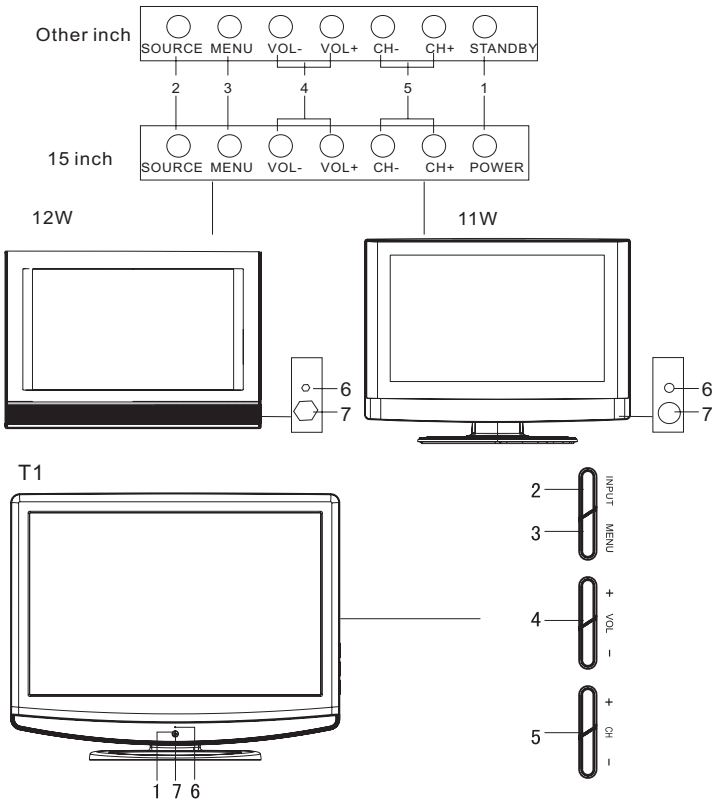
Note: DVD is only available for certain models, please refer to actual products

Safety Notice

To prevent fire or electric shocks please read the instruction before installing, using and cleaning the television.

- Please read all the instructions before operation;
- Please keep the manual for future reference ;
- Do not use any accessories that are not recommended by the manufacturer:
- Before operation, make sure the operating voltage of this unit is corresponds with your house electrical supply;
- Do not place the unit on unstable or in dusty and humid places;
- Never put the unit in direct sunlight or near heat sources;
- Allow enough space for proper ventilation;
- Please keep water away from the LCD-TV . If water comes in to contact with the LCD-TV, disconnect the power cord from the power source, then wipe the set with a dry soft cloth;
- Do not remove the back cover. If servicing is required , please refer to customer helpline.

Front Panel Controls

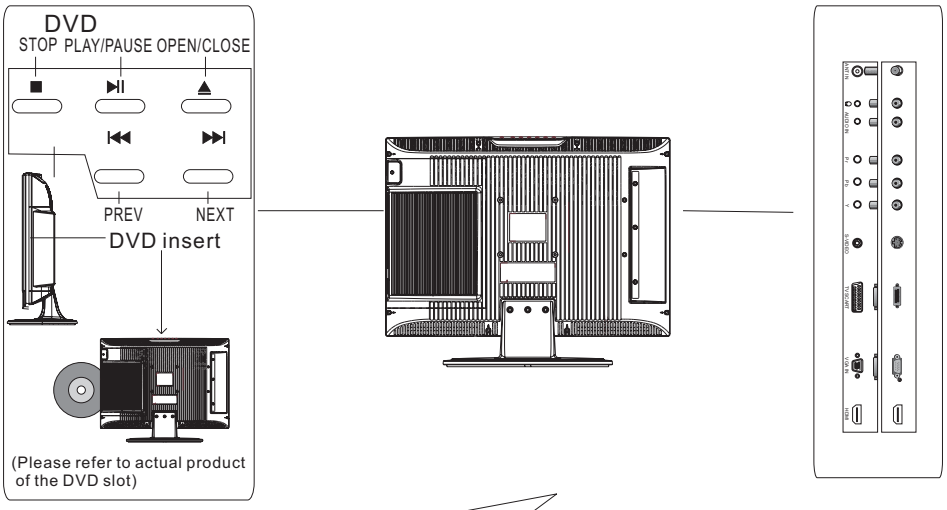


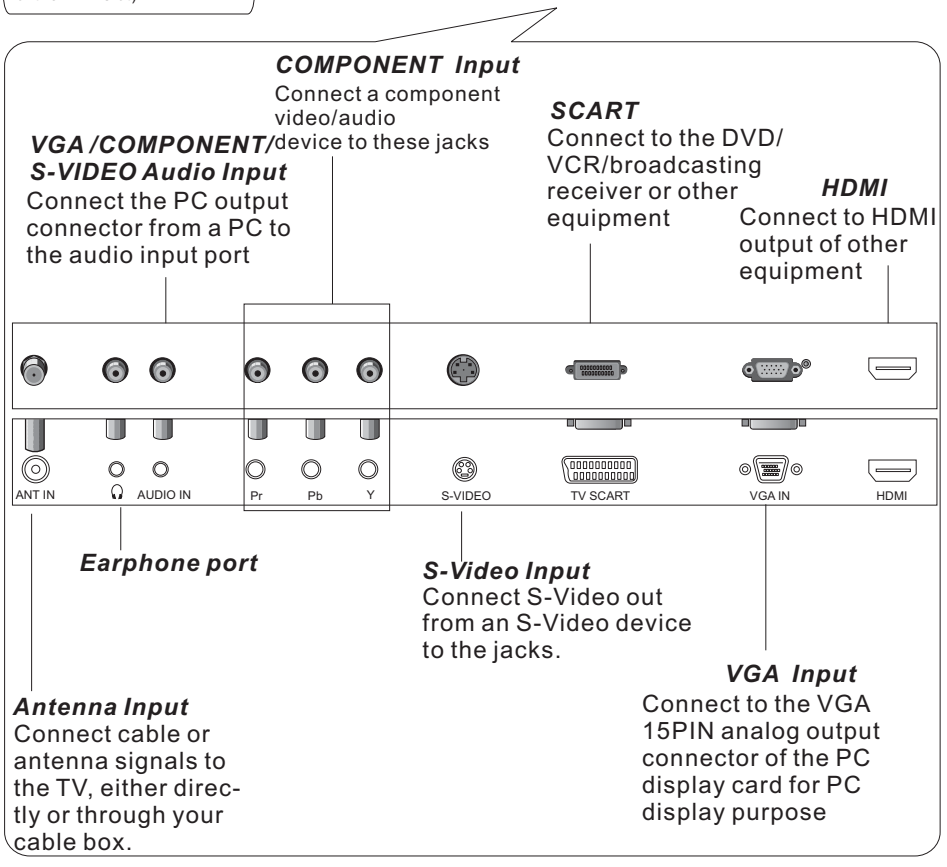
(The figure above and the description of the button may be different, just see the actual set.)

Control Panel Function

1. Standby switch
2.SOURCE Select the input signals: PC/COMPONENT/DVD/HDMI/DTV TV/SCART/S-VIDEO
3. MENU Press to select the main menu
4. VOL- Volume down / Left orientation to adjust the item in the OSD
   VOL+ Volume up / Right orientation to adjust the item/Press to enter
5. CH- TV channel down / to select the item in the menu
   CH+ TV channel up / to select the item in the menu
6. Power indicator
   Illuminates red in standby mode, illuminates green when the display is turned on
7.Remote Sensor

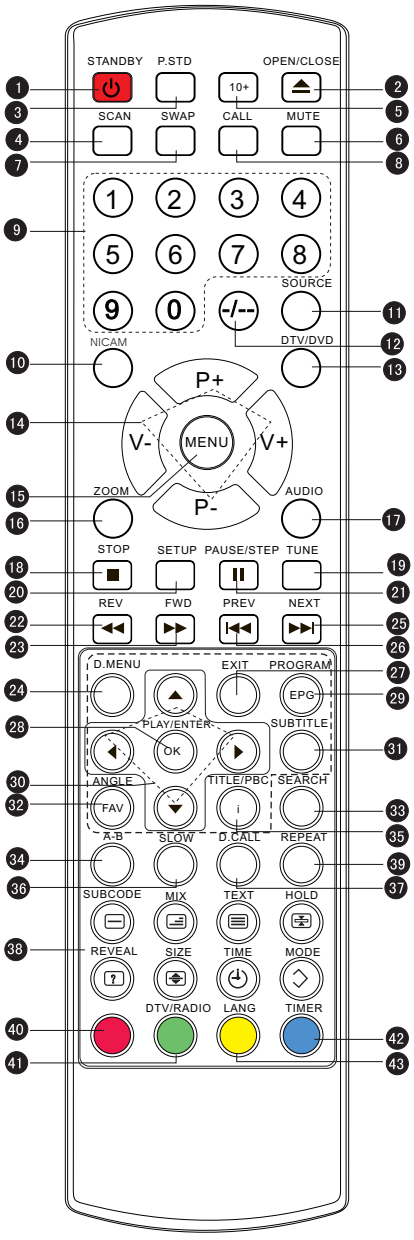
Connection Options




COMPONENT Input
Connect a component video/audio device to these jacks
VGA /COMPONENT/ S-VIDEO Audio Input
Connect the PC output connector from a PC to the audio input port
SCART
Connect to the DVD/ VCR/broadcasting receiver or other equipment
HDMI
Connect to HDMI output of other equipment
ANT IN
AUDIO IN
Pr
Pb
Y
S-VIDEO
TV SCART
VGA IN
HDMI
Earphone port
S-Video Input
Connect S-Video out from an S-Video device to the jacks.
VGA Input
Connect to the VGA 15PIN analog output connector of the PC display card for PC display purpose
Antenna Input
Connect cable or antenna signals to the TV, either directly or through your cable box.

Remote Control Key Functions(for TV/DVD Combi)

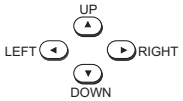
When using the remote control, aim it towards the remote sensor on the TV



(For TV/DVD Combi Models)

Buttons on the remote control

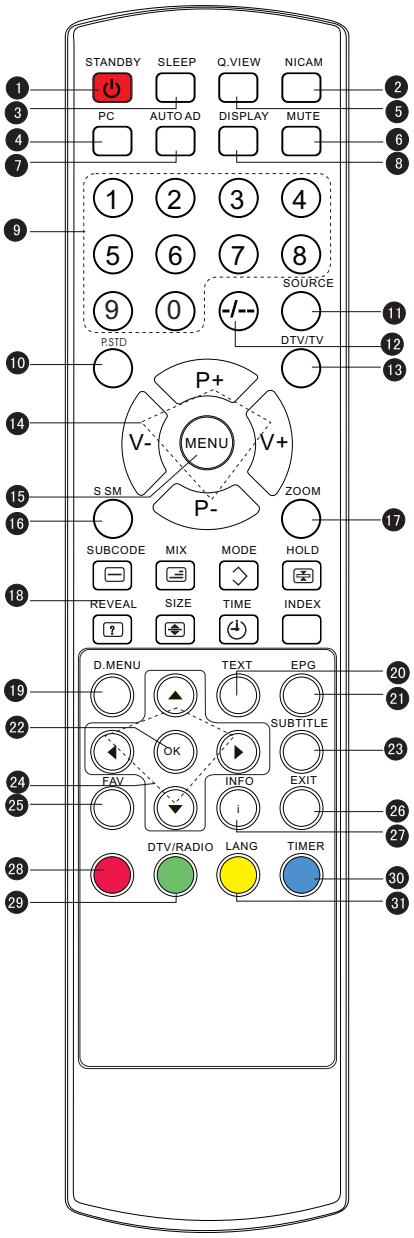
1. Stand By
2. DVD Open/close
3. Picture Mode
4. Scan
5. DVD 10+
6. Mute
7. Swap
8. Call Screen Display
9. Program Number
10. NICAM
11. Source Exchange
12. Digital Selector
13. DTV/DVD
14. Volume/Channel Selection
15. MENU
16. Zoom
17. DVD Audio
18. DVD STOP
19. Tune Menu Button
20. DVD SETUP
21. DVD PAUSE/STEP
22. DVD FAST REVERSE
23. DVD FAST FORWARD
24. DVD/DVB-T MENU
25. DVD NEXT
26. DVD PREVIOUS
27. Exit Screen Display
28. DVD PLAY/ENTER/DVB-T ok button
29. DVD PROGRAM/ DVB-T EPG button
30. DVD /DVB-T Cursor Move button
31. DVD /DVB-T SUBTITLE
32. DVD ANGLE/ DVB-T favourite
33. DVD SEARCH
34. DVD A-B REPEAT
35. DVD TITLE/PBC/DVB-T information button
36. DVD SLOW
37. DVD CALL
38. TELETEXT BUTTONS
39. DVD REPEAT
40. RED button
41. Green button
42. Yellow button (Language fast button in DTV)
43. Blue button



Fast text button in analog signal
Function button in DVBT (just reference the OSD)

Remote Control Key Functions(for TV/DTV only)

When using the remote control, aim it towards the remote sensor on the TV



(For TV /DTV Models)

Buttons on the remote control

1. Stand By
2. NICAM
3. Sleep
4. Switch to PC mode
5. Return the last watched program channel
6. Mute
7. Automatically adjust in PC mode
8. Call Screen Display
9. Program Number
10. Picture mode
11. Source Exchange
12. Digital Selector
13. DTV/TV
14. Volume/Channel Selection
15. MENU
16. Sound mode
17. Zoom
18. TELETEXT BUTTONS
19. DVB-T MENU
20. TEXT BUTTON
21. DVB-T EPG button
22. DVB-T ok button
23. DVB-T SUBTITLE
24. DVB-T Cursor Move button
25. DVB-T favourite
26. Exit Screen Display
27. DVB-T information button
28. RED button
29. Green button
30. Blue button
31. Yellow button

UP / LEFT / RIGHT / DOWN

Fast text button in analog signal
Function button in DVBT (just reference the OSD)

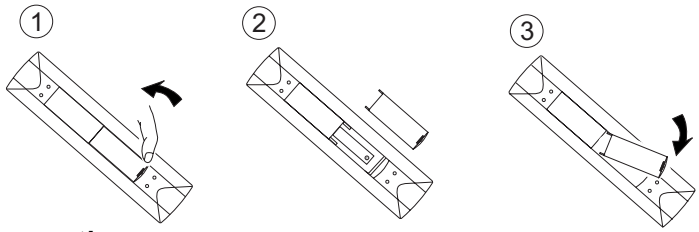
(Language fast button in DTV)

Note: the instruction on this manual is taking TV/DVD combi remote control as an example.

Remote Control Key Functions

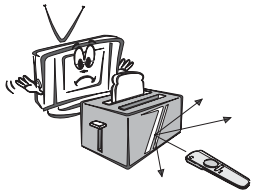
Installing Batteries

1.Open the cover of the battery compartment at the back of the remote control.
2.Insert two AA alkaline batteries in the compartment. (plus and minus poles to respective mark)
3.Replace the cover of the battery compartment.

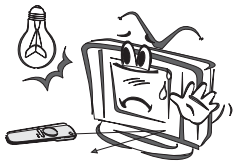


Precautions

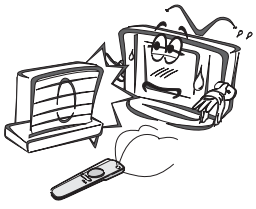
Make sure that there is no obstacle between the remote controller and television set.



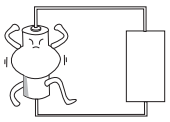
As strong light may interfere the signals, change your position to operate the remote controller if the television cannot be turned on or off as you expect.



Keep the remote controller away from heat source or humid area to ensure effective performance of the remote controller.



Make sure that two AA 1.5V alkaline batteries are loaded. The batteries must be of the same type. The batteries must be located properly. The batteries are not rechargeable. If your TV is to be stored for a period of time, remove the batteries from the remote control.



Connection Instructions

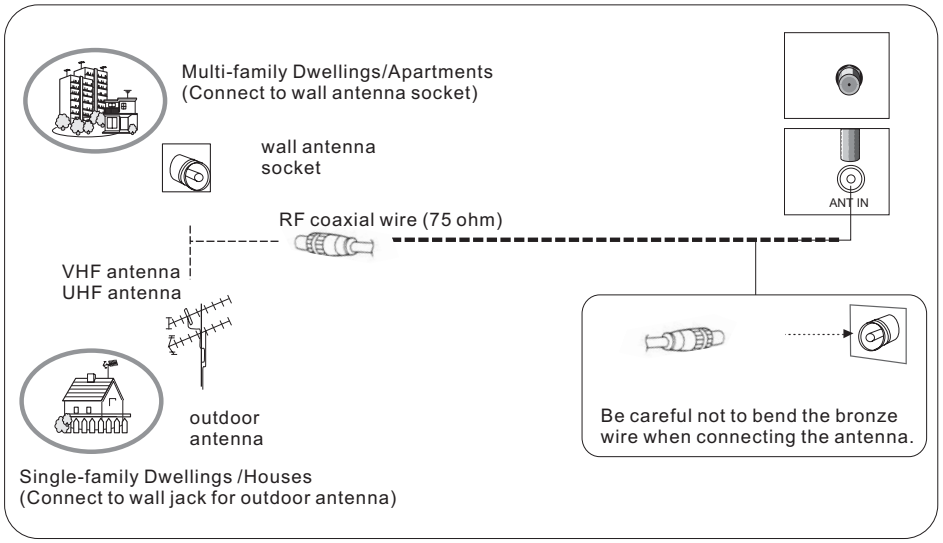
Grounding

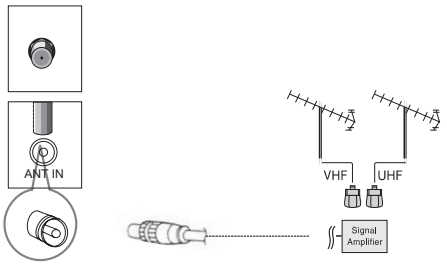
Ensure that you connect the grounding / earth wire to prevent possible electric shock. If grounding methods are not possible, have a qualified electrician install a separate circuit breaker. Do not try to ground the unit by connecting it to telephone wires, lightening rods, or gas pipes.

External Equipment Connections

Antenna Connection

- Antenna or Cable Service with a Cable Box Connections
- For optimum picture quality, adjust antenna direction if needed.





- To improve picture quality in a poor signal area, purchase and install a signal amplifier.
- If the antenna needs to be split for two TV’s, install a “2-Way Signal Splitter” in the connections.
- If the antenna is not installed properly, contact your dealer for assistance.

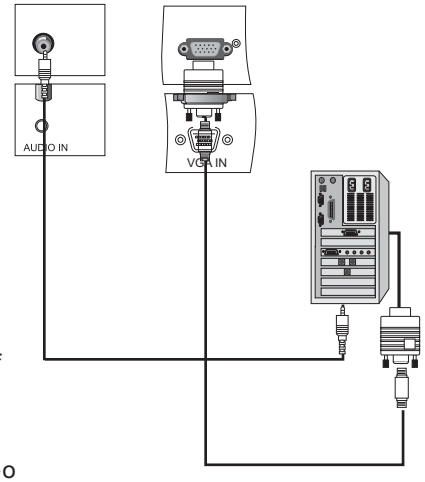
NOTE: All cables shown are just for example.

Connection Instructions

VGA Input

You can use your LCD-TV as a monitor for your personal computer using a VGA cable (not supplied).

Connection and use steps:



1. Read the user guide supplied with your computer and ensure that it has a VGA connector;
2. Make sure that the power of the LCD -TV and the PC are off;
3. Connect a D type 15-pin VGA interface cable (not supplied) to the VGA video interface connector on the PC. Then connect the other end to the PC video interface connector on the back of the LCD-TV.Tighten the screws on the VGA connectors once they are firmly connected, connect the audio cable(not supplied)to the audio input on the back of your LCD-TV;
4. Turn on the power of the LCD-TV first , and then turn on the power of the PC;
5. Press the **SOURCE** button to set the video input mode of the LCD-TV to PC;
6. Check the image on your TV. There may be noise associated with the resolution, vertical pattern, contrast or brightness in PC mode. If noise is present, change the PC mode to another resolution, change the refresh rate to another rate or adjust the brightness and contrast on the menu until the picture is clear. If the refresh rate of the PC graphic card cannot be changed,change the PC graphic card or consult the manufacturer of the PC graphic card.

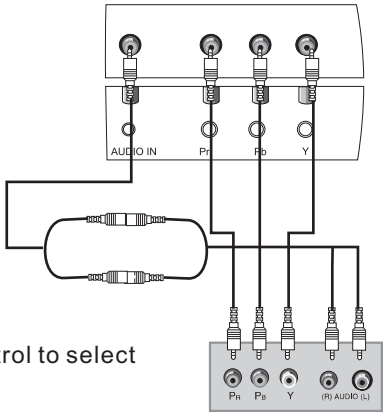
Mode	Resolution	Line frequency (Khz)	Frame frequency (Hz)
VGA	640*480	31.5KHz	60Hz
SVGA	800*600	37.9KHz	60Hz
XGA	1024*768	48.4KHz	60Hz

Note: All above listed are subject to VESA Criteria.

YPbPr Input

How to connect

Connect the DVD video outputs (Y, PB, PR) to the COMPONENT(Y, Pb, Pr) IN socket on the TV and connect the DVD audio outputs to the AUDIO IN jacks on the TV, as shown in the figure.



NOTE: If your DVD player does not have component video output, use S-Video.

How to use

1. Turn on the DVD player, insert a DVD.
2. Use the **SOURCE** button on the remote control to select

Connection Instructions

COMPONENT (If connected to S-VIDEO,select the S-VIDEO external input source.)
3. Refer to the DVD player's manual for operating instructions.

Component Input ports

To get better picture quality, connect a DVD player to the component input ports as shown below.

Component ports on the TV	Y	P_B	P_R

Video output ports on DVD player			
	Y	Pb	Pr
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	P_B	P_R

S-VIDEO Input

- To avoid picture noise (interference), leave an adequate distance between the VCR and TV

Connection and use steps:

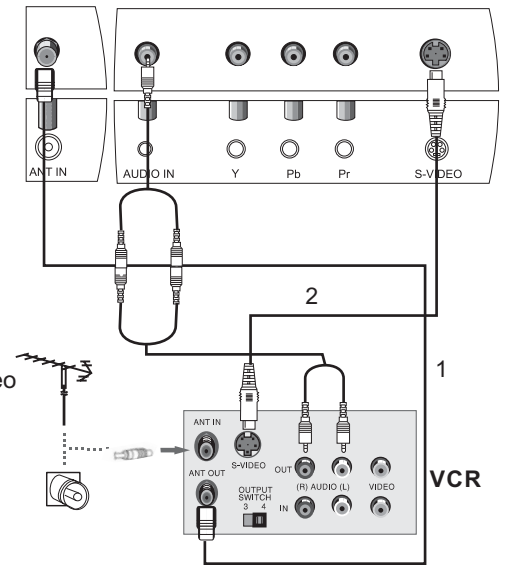
1.Read the user guide supplied with your AV devices and ensure that it has S-Video connectors;
2.Make sure that the power of the LCD-TV and the AV device are switched off;

Connection Option 1

Set VCR output switch to 3 or 4 and then tune TV to the same channel number.

Connection Option 2

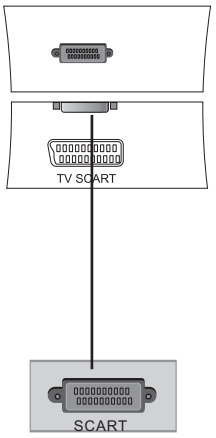
1. Connect the audio and S-VIDEO cables from the VCR's output jacks to the TV input jacks, as shown in the figure.
2. Insert a video tape into the VCR and press PLAY on the VCR. (Refer to the VCR owner′ s manual.)
3.Turn on the power of the LCD-TV first ; and then turn on the power of the AV device;
4.Press the **SOURCE** button to set the video input mode of the LCD-TV to S-VIDEO mode .



Connection Instructions

SCART Input

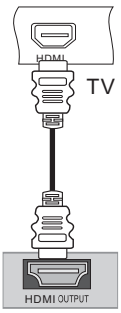
1.Connect the scart lead from the external device(DVD players, settop boxes or game consoles, to the TV SCART socket.
2.Press **SOURCE** to select SCART mode.
3. Press Play button on external equipment and it should appear on the screen.



External equipment

HDMI Input

HDMI Devices
Connect the cable from the HDMI devices to the TV HDMI, as shown in the figure.
How to use
1. Select the HDMI source by using the **SOURCE** button on the remote control.
2. Operate the corresponding external equipment. Refer to external equipment operating guide.



HDMI Devices

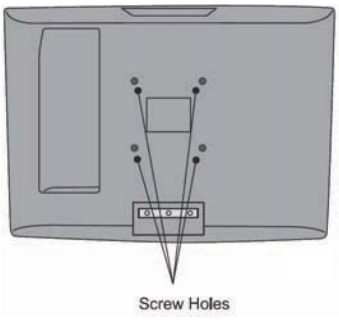
Note: The audio cable included with the TV should be used when connected with PC/ COMPONENT/S-VIDEO.

Wall Mounting

Use 4 machine screws(M4x8mm not included) to mount the TV on the Bracket(not included)

For the Wall Bracket-Refer to the user instructions supplied with the wall bracket(not included)

Remark: Wall mount is not applicable to 15 inch TV



Basic Operating Instructions

Turn on the LCD-TV

When the **POWER(STANDBY)** button on the remote control is pressed and the LCD-TV is turned on, the indicator light on the front of the LCD-TV changes from red to green. When the LCD-TV is turned off using the **POWER(STANDBY)** button, the LCD-TVwill go into standby mode and the indicator light turns red.

You can also turn on the TV from standby mode by pressing the digits(1-9) or P+/- .

The display will appear on the screen when the TV is turned on the first time:
(Different displays for different countries, please see the real set)

AUTO SEARCH		Or	AUTO SEARCH	
UNITED KINGDOM			OTHER	
NO	YES		NO	YES

Press **V+/-** to adjust among countries list on the screen just according to the country you are in, **P+/-** to select the option and **MENU** to confirm.

Audio Control

1.Press the **V+** button to increase the volume.
2.Press the **V-** button to decrease the volume.

Mute

1.Press the **MUTE** button to mute the sound temporarily. A mute icon appears on the screen.
2.Press the **MUTE** button again or **V+** to restore the sound.
The mute icon disappears.

Basic Operating Instructions

Select the TV Channel

You can use the number keys on the remote control to directly select TV channels.
The LCD-TV can store up to 100 channels , and you can press the keys on the remote control or on the panel to make a selection.

1. if you want to choose any channel from 0 to 9, please press the "**-/--**" button until "**-**" is indicated on the screen and then press the relevant key on the remote control.（for example: if you want to choose channel 8, just press the Key number 8.）
2.If you want to choose a channel bigger than 9, please press the "**-/--**" button until "**--**" is indicated on the screen. Enter the two digits of the channel number you want to watch..（for example: select channel 16）

Note: if you want to choose one digit channel in this condition, you should press 0 first and then one digit number key.

Picture Mode

Press **P.STD** button on the remote control for menu display . For desired mode as follows:
PERSONAL→ STANDARD→ MILD→FRESH

Program Swap

1 Suppose the channel number you used is now channel 8 and the channel number you are using is 18 (as shown in the figure).
2 If you want to return to the last watched program channel 8, you can simply press the **SWAP(Q.VIEW)** button.
3 If you want to return to channel 18, press the button again. Through this function, you can easily change between the channel you are using and the channel you used last time.

Menu Operations

1. Press **MENU** button to display the main menu, and **V+/V-**to select the main menu .
2. Press **P+/P-** to scroll through the options
3. Press **V+/V-** buttons to make changes to the parameters
4. Press the **EXIT** button to exit the menu

Picture Menu Options

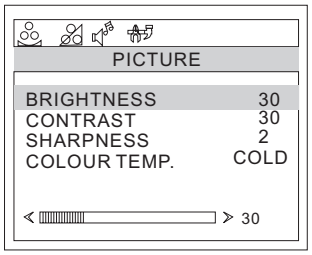
Picture quality can be adjusted for any input separately .

The picture quality on the screen can be adjusted as follows:

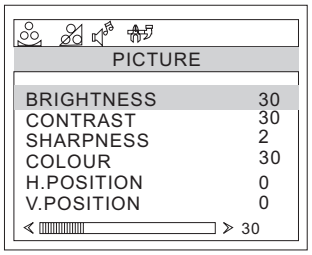
1. Press **MENU** button and **V+/V-** until the following menu appears on the screen.

2. Press **P+/P-** button to enter the picture menu and to go up and down to select the desired option .

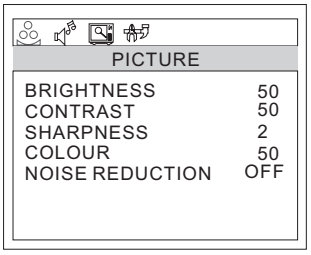
PC MENU



HDMI/COMPONENT MENU



TV/S-VIDEO/DVD/SCART/DTV MENU



Menu Operations

Picture Menu Options Continued

3.Press **V+/V-** button to increase and decrease the level to match your preference .

4. Repeat step 2 and step 3 until desired picture quality has been achieved .

Functions:

BRIGHTNESS :Adjust the brightness of the picture . By increasing the level, it will add more light to dark parts of the picture and by decreasing the level ,it will add more dark to light parts of the picture.

CONTRAST : The image becomes higher as the number increase.

SHARPNESS : By increasing the level, it will show cleaner and clearer images and by decreasing the level, it will make picture smoother.

COLOUR : Press **V+/V-** to adjust the colour

NOISE REDUCTION: Adjust the quality of the picture by selecting OFF,LOW, MID,HIGH.

COLOUR TEMP. : Press to select the colour temperature from WARM/NORMAL/ COLD

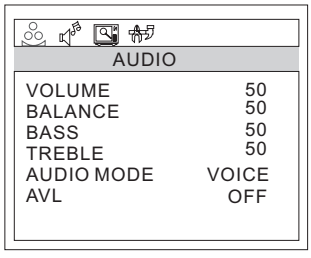
H.POSITION : Picture horizontal adjust

V.POSITION : Picture vertical position adjust .

Audio Menu Options

Sound can be adjusted as follows:

1. Press **MENU** and **V+/V-** button until the following menu appears on the screen



Menu Operations

Audio Menu Options Continued

2. Press **P+/P-** button to enter the audio menu and to go up and down to select the desired option .

3.Press **V+/V-** button to increase and decrease the level to match your preference .

4. Repeat step 2 and step 3 until desired sound quality has been achieved .

Functions :

VOLUME : Adjust the volume of your TV

BALANCE : Adjust the balance of the audio output from left to right . When indication value of balance increases towards 100 , sound of the left speaker becomes weaker . When indication value of balance decreases towards 0 , sound of the right speaker become weaker .

BASS : Adjust the bass of the sound . Can only be adjust under PERSONAL mode .

TREBLE : Adjust the treble of the sound . Can only be adjust under PERSONAL mode .

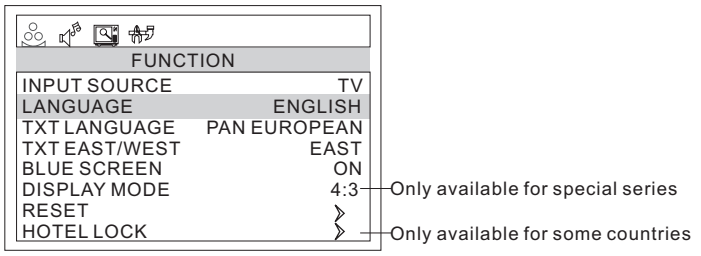
AUDIO MODE : Press **V+/V-** to select among PERSONAL, VOICE, MUSIC and THEATRE .

AVL: Automatic Volume Limit Control reduces the effect of the large volume by the same volume of all the channels .

Menu Operations

Function Menu Options

1. Press **MENU** button and **V+/V-** until the following menu appears on the screen.



2. Press **P+/P-** button to enter the function menu and to go up and down to select the desired option .

3. Press **V+/V-** button to increase and decrease the level to adjust the selected option to your preference .

4. Repeat step 2 and step 3 until desired effect has been achieved .

Functions:

1. INPUT SOURCE : Display current mode . There are PC , COMPONENT , DVD , HDMI, DTV, TV, SCART, S-VIDEO to display

2. LANGUAGE: Used to select the OSD language.

3. TXT LANGUAGE: To switch the teletext languages.

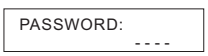
4. TXT EAST/WEST: To select EAST or WEST .

5. DISPLAY MODE: To select the display mode between 4:3,16:9 and FULL SCREEN

6. BLUE SCREEN:To set On, the screen will be in blue screen after 3 seconds if there is no signal.

7. RESET : Press **V+** to reset some settings to the factory default .

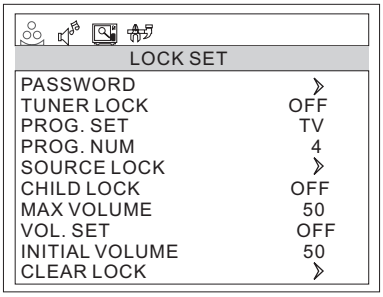
8. HOTEL LOCK: Press **V+** to enter it and the following appears on the screen:



If password is correctly entered, the Lock set menu will be entered. If the password is not correctly entered, you will be required to reenter the password and the cursor will stay at the first place. Lock set menu is as follows:
(The initial password is 0000. If CLEAR LOCK is activated, the password comes back to initialization and each lock is canceled)

Menu Operations

Function Menu Options Continued



PASSWORD: The password can be changed. Press **P+/-** to select PASSWORD and **V+** to enter. The screen will display NEW PW: ----, then enter the new password and the screen display CONFIRM PW: ----, if the same password is entered correctly twice, the password will be changed.

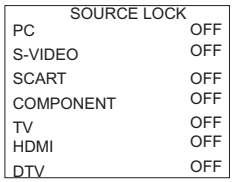
TUNER LOCK: Press **P+/-** to select Tuner Lock and V+/- to set ON/OFF.(To set ON, some operation such as search will be not available. When enter the TUNING menu, TUNER LOCK will be on the screen. If you want to operate TUNING menu again, you need to enter the menu to set TUNER LOCK OFF or operate CLEAR LOCK.

PROG.SET:Opted for setting up start condition. Press P+/- button to select it. Press **V+/-** button, sources can be swapped in HDMI/DVD/COMPONENT/PC/ S-VIDEO/SCART/TV/DTV/OFFmode. After setup, the set mode will be entered if the television is switched off and on again. To set Off, the television will memory the off-mode.

PROG.NUM: Opted for setting up preset channel. Press **P+/-** button to select it. Press **V+/-** button, to select channel number.(The item is not available except TV signal.)

CHILD LOCK: Press **P+/-** button to select it. Press **V+/-** button to set on or off mode. If lock on mode is set, child lock is activated . In such case, if buttons on the television is pressed, the screen will display CHILD LOCK.
The child lock mode can be canceled by entering lock set menu, set child lock off or activate clear lock.

SOURCE LOCK: Opted to hinder external input modes, such as PC. Press **P+/-** button to select the option, and press **V+** button to display the menu as follows:



Menu Operations

Function Menu Options Continued

Press **P+/-** button to select desired option. Press **V+/-** button to set up the mode . If some source is set on, The screen will display blue background with the mute mode and Lock icon when you enter the source.
In lock on mode, when screen is blank, SOURCE LOCK will be always displayed on the screen. If you want to cancel the lock of some source mode, enter SOURCE LOCK submenu and set the mode off, or activate CLEAR LOCK .

MAX VOLUME:Press **P+/-** button to select it. Press **V+/-** button for adjustment between 0～100. If a certain value is set, when volume is being adjusted, the sound value can not exceed that maximum volume value.

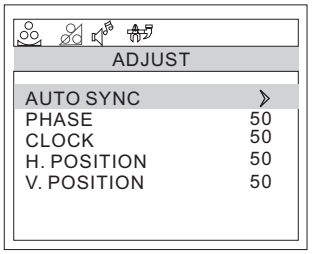
VOL SET: Press V+/- to select ON or OFF.

INITIAL VOLUME(only works when VOL SET is set ON): Used to memory the volume you have set when you turn on your TV after turn off it. (Eg., When INITIAL VOLUME is set to 50, you can still adjust the volume above or below 50 by V+/- . If the TV is turned on the second time, the volume will resume 50)

CLEAR LOCK: Press **P+/-** button to select it. Press **V+/-** button to unlock all set modes, setting all lock options to off, and the maximum volume returns to 100.

Adjust Menu Options

1. Press **MENU** and **V+/V-** button until the following menu appears on the screen



Note: This menu only appears in PC mode .

2. Press **P+/P-** button to enter the adjust menu and to go up and down to select the desired option

3.Press **V+/V-** button to increase and decrease the level to adjust the selected option to your preference .

4. Repeat step 2 and step 3 until desired quality has been achieved.

Functions:

AUTO SYNC : Is opted for adjustment of picture location frequency and phase parameters .

Menu Operations

PHASE : Removes any horizontal distortion and clears or sharpness the displayed characters .

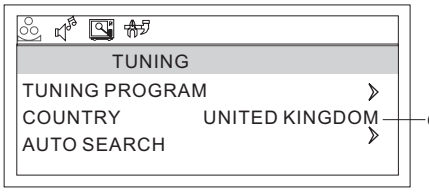
CLOCK : Adjust the TFT-LCD to match the PC input source

H.POSITION : Picture horizontal adjust

V.POSITION : Picture vertical position adjust .

Tuning Menu Options

1. Press **MENU** and **V+/V-** button until the following menu appears on the screen



Note: This menu only appears in TV mode .

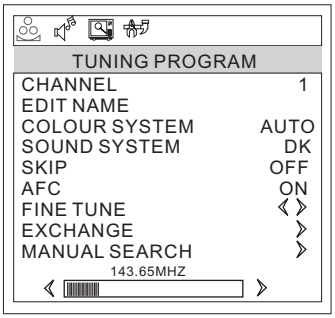
2. Press **P+/P-** button to enter the tuning menu and to go up and down to select the desired option .

3.Press **V+/V-** button to increase and decrease the level to adjust the selected option to your preference .

4. Repeat step 2 and step 3 until desired quality has been achieved ..

Functions:

1.TUNING PROGRAM: Press V+ to enter it and the TUNING PROGRAM menu appears:



CHANNEL : Press **V+/V-** to change the TV channel .
EDIT NAME: Press V+ to enter it , then press V+/- to select the position you want to edit and press P+/- to input the emblem such as character and so on.(There are 8 position for you to edit totally)

COLOUR SYSTEM : Select the TV colour system from AUTO,PAL,SECAM.

Menu Operations

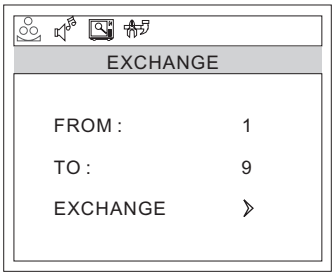
Tuning Menu Options Continued

SOUND SYSTEM : Select the TV standard system from DK,I,L/L',BG.
(L' may be not available in some countries)

SKIP : If you want to skip a channel , press **V+/V-** to select ON , and this channel will be skip next time when you press **P+/P-** . But you can press digits button to select the channel . If you want to restore the channel , select OFF.

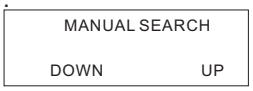
AFC : Auto frequence control . Select ON to improve the image quality .

FINE TUNE :Press **P+/P-** to select FINE TUNE item in menu . Then , press **V+/V-** button to adjust and improve the image quality .
EXCHANGE : Press **V+** to display the menu as follows:



Press **P+/-** to select the item and then **V+/-** to adjust the channel and **V+** to confirm.(For example: press **P+/-** to select FROM item, and then press **V+/-** to adjust the channel number to 1; then Press **P+/-** to select TO item, and **V+/-** to adjust the channel number to 9; press **P+/-** to select EXCHANGE item, and then **V+** to confirm. The two channels will be exchanged)

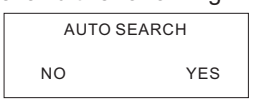
MANUAL SEARCH : Press **V+** to start to search the channel . The following menu will display on the screen:



Press V+/- to select UP or DOWN, and then press MENU to confirm.
(If you select DOWN, the search will search the lower frequency channel and UP will search the higher frequency channel)

2.COUNTRY: Press V+/- to select the country .

3. AUTO SEARCH : Auto search and save the channel .Press the **V+** button to start to search the channel and the following menu will appears on the screen:



Press **V+/-** to select YES or NO, and menu to confirm.
You could press MENU to stop the search.

NOTE: If you want to search the channels in L or L' system, you need to set the sound system to L in OSD

DVB-T Main Menu Operations

Press the DTV/DVD button on the remote control to enter the DVB-T status.
Press TEXT button to display the additional information.

1. Press **D.MENU** button to display the main menu
2. Press▲/▼ to scroll through the options
3. Press **OK** button to confirm enter the submenu
4. Press the **D.MENU or EXIT** button to exit the menu

Note:Just according the display on the menu to operate.

Installation

1. Press **D.MENU** button , the main menu will appear.

2. Press ▲/▼ button to select Installation and OK button to confirm enter the sub-menu.

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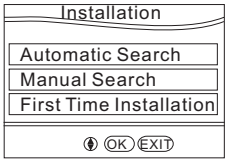
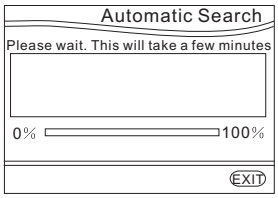


Automatic Search

Press ▲/▼ button to select Automatic Search. Press OK button to enter the sub-menu and press ◀ / ▶ button to select Yes or No then press OK to confirm.



This screen shows you the services searched and the progress in scan. Please wait for a few minutes before the search is finished. You can cancel the search by pressing EXIT button.

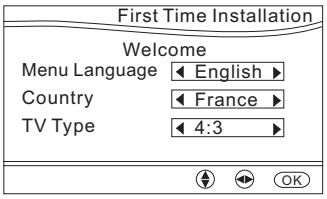
Manual Search

Press▲/▼button to select Manual Search and OK button to enter. Then input the Channel Number and OK to start to search, press D.MENU to exit.

DVB-T Main Menu Operations

First Time Installation

Press ▼/▲ button to select First Time Installation and OK button to display the password confirmation menu.(The password is 0000) and then press ◀ / ▶ button to select Yes and OK to enter the sub-menu.



1) Firstly select the Menu Language which will be used in all other menus by by pressing ◀ / ▶ button, then press ▼/▲button to select country.
2) Press ◀ / ▶ button to select a country from the county list.
3) Press ▼/▲ button to select TV Type, then press ◀ / ▶ button to select the desired TV format.
4) You can go to Main Menu screen by pressing EXIT button.
5) Press OK button and ◀ / ▶ to select Yes and OK to launch the automatic channel installation.

Note: For terrestrial receiver, the country choice is used by the software for channels installation, thus the country must be the correct one.

You can see all TV and Radio channels found during the scanning.
Once the automatic installation is finished. The first channel is then automatically displayed in the TV Channel List screen.

Favourite Lists

The Favourite Lists screen enables you to select up to five TV favourite lists and. When you select a favourite list by the FAV button, only
the channels in the list is available when you view channel or consult EPG.
The Favourite Lists screen contains a scrolling list of all channels. Pre-defined lists and a set of buttons to enable the user to toggle a channels inclusion in a favourite list. A favourite mark indicates that this channel is member of a favourite list.

1. Press **D.MENU** button , the main menu will appear.

2. Press ▲/▼ button to select Favourite Lists and OK button to confirm enter the sub-menu.

3. Then press ◀ / ▶ to select the pre-difined list.

DVB-T Main Menu Operations

4. Press ▼/▲ button to select the channel and OK button to set .
The favourite mark will appears alongside the selected channel. This mark indicates that this channel is a member of the selected list. Press OK again will remove the channel from the list.

5. Press the red colored button will remove all channels from the selected list.

6. Press DTV/RADIO button allows you to switch between TV and radio in DTV mode.

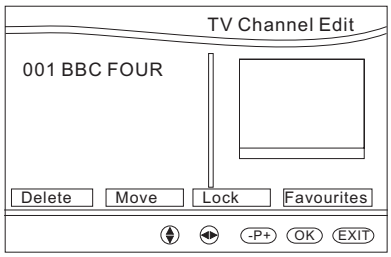
7. Press EXIT button to exit the favourite lists screen. This will take a few seconds to save your settings and a waiting screen is displayed

After the operation, you can press FAV button to display the favourite list channel then press OK to display the Favourite Lists.

Channel Edit

1. Press **D.MENU** button , the main menu will appear.

2. Press ▲/▼ button to select Channel Edit and OK button to confirm enter the submenu.



Delete : Press the ▼/▲ button to select the channel, and then press the ◀/▶ button select the Delete. Press the OK button to delete the channel. A confirmation screen will be displayed. Press ◀/▶ button to choose Yes or No, then press OK button. If you choose Yes, the selected channel will be permanently deleted.

Move : This function will change the position of two different channels in the channel list. Press the ◀/▶ button to select Move, and then press the ▼/▲ buttons to select the channel and OK button. The move indicator appears alongside the highlighted channel. The indicator will disappear if you press OK button again. Press button to select another channel and press OK button. The position of the two channels will exchange.

DVB-T Main Menu Operations

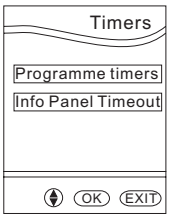
Lock: Press the ▼/▲ button to select the channel, and then press the◀/▶ button select the Lock. Press the OK button to set lock. The lock indicator appears alongside the highlighted channel, then this channel is locked. Repeat the operation to remove the lock. The indicator will disappear.(default lock key 0000)

Favourite: Press the ◀/▶ button to select the Favourite,and then press the OK button to enter the Favourite List menu. You can set the Favourite channel list. (You can call the Favourite List menu by pressing the FAV button on the remote control.)

Timers

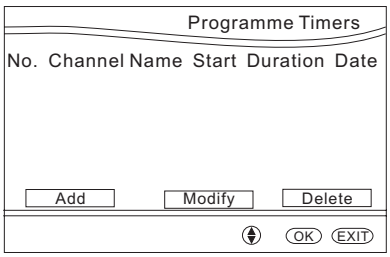
1. Press **D.MENU** button , the main menu will appear.

2. Press ▲/▼ button to select Timers and OK button to confirm enter the sub-menu. The sub-menu allow you to program timers for VCR(Programme timer). And set the duration for the channel banner display(Info Panel Timeout).



Programme Timers

The user may set a timer to select a channel for a period of time(such as recording) You can add a new timer, modify or delete an existing timer in the Programme Timer screen. Up to 10 timers could be created and no conflicting timer could be set in this screen. Timers may be set to be triggered once, daily, or weekly(Monday Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday).



DVB-T Main Menu Operations

Timers

When setting a timer the pin code must be supplied to a parental controlled service. So that the timer can override any parental control when is triggers. A timer could be triggered in standby or viewing mode. the receiver is locked during a timer is running. You can unlock the receiver by pressing the TIMER button then the EXIT button, then the timer is cancelled.

When a timer is triggered whilst in standby mode the service for which the timer was set will be selected. At the end of the timer the receiver will return to standby mode.

Add Timer
Add timer function allows you to create a new timer.
1) Press the ◀ / ▶ button to highlight Add and press OK to enter the Add New Timer screen when you are in the programme Timer screen. You could also enter this screen by pressing the TIMER button during viewing.
2) Set the following items for the new timer:
- Channel Number: Select the channel by press the ◀ / ▶ button.
- Repeat: Periodicity of the timer. You can select from the list of once, daily and weekly(from Monday to Sunday) by pressing the ◀ / ▶ button.
- Date(dd/mm/yyyy)(only available when Repeat is set Once) : The day, month and year. Press ◀ / ▶ button to select the position and digits button to set.
- Start Time(hh:mm): Begin time of the service to record with the format hh:mm.
- Duration: Total time to record with the format hh:mm.
3) Press OK to save this timer and EXIT to give up this timer.

Modify timer
This function allows you to modify the programmed timers from the timers list.
1) Press ◀ / ▶ button to select Modify in the Programmes Timers screen.
2) Press ▼/▲ button to select th timer you want to modify and OK button to enter the Modify Timer screen. All items of this timers are displayed.
3) Modify the items with the way described in Add Timer.
4) Press OK button to save the changes and return to Programme Timer screen.
5) Press EXIT button to give up the changes and return to Programme Timer screen.

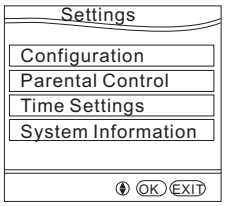
Delete Timer
You can delete the programmed timers from the timers list.
1) Press ◀ / ▶ button to select Delete in the Programme Timers screen.
2) Press ▼/▲ button to select the timer you want to delete and press OK to delete.
A pop-up confirmation window is displayed if you select Yes and press OK button. The selected timer will be deleted.

Info Panel Timeout
This sub-menu allows you to set the display duration of the info panel. You can select from the list of 3,4,5,6,7,8,9,10,11 seconds by pressing ◀ / ▶ button.

DVB-T Main Menu Operations

Settings

The Settings menu includes several sub menus: Configuration, Parental Control, Time Settings, Upgrade and System Information.

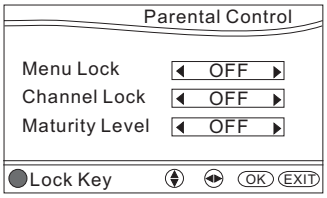


Configuration

In the configuration menu you may select the Menu/Subtitle/Audio Language. Set the TV Type and enable/disable the subtitle display.
1) Menu Language: the language used in the menu. It could be selected from the pre-defined list by the ◀/▶ button.
2)Audio Language: the default audio language for all services selected from the pre-defined list by pressing ◀/▶ button.
3)Subtitle Language: the default subtitle language for all services selected from the pre-defined list by pressing ◀/▶ button.
4) TV Type: Allows you to set as 4:3 or 16:9 according to the received data by pressing ◀/▶ button.
5) Subtitle: Allows you to set as ON or OFF by pressing the ◀/▶ button. Normally, when it is set to On, the subtitle will be displayed during viewing.
6) Press OK button to save all settings.

Parental Control

The parental control allows you to enable/disable the menu lock,The channel lock, the maturity level and change the current lock key/password(the default is0000) to any new lock button for security purposes.
1) Enter the parental control menu by navigating main menu -settings-parental control.
2) Setting the following items:

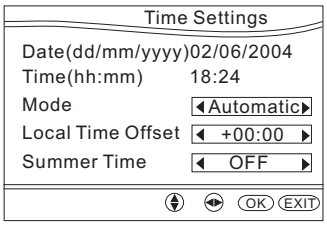


DVB-T Main Menu Operations

- **Menu Lock**: Press ◂ / ▸ button to select ON or OFF. Access the Main Menu and all sub-menus will require the correct lock key input when this item is set to ON.
- **Channel Lock**: Press ◂ / ▸ button to select ON or OFF. ON means that the lock key is required to view the locked channels(defined in the Channel Edit menu) while OFF is not.
- **Maturity Level**: Press ◂ / ▸ button to select the age from the list of Off,3.... All services whose age limits are larger than the selected age can not be accessed unless input the correct lock button. Off means that the age limit contained in the services is not effective.
- **Lock Key**: Pressing the red colored key to change the Lock Key. You will be asked to enter the 4 digits New Lock Key. Then re-enter to confirm. The New Lock Key will be automatically saved.
- Press OK button to save the settings.

Time Setting

Time Setting screen is used to set the local time in two modes: Automatic mode and Manual mode.



1) Mode: Press ◂ / ▸ button to select the Automatic or Manual mode.
2) Automatic mode: in this mode, date and time is automatically set by the time information from the data received. You need only to set the Local Time Offset to GMT and the Summer Time.
- Local Time Offset: you can set the offset from the list by pressing ◂ / ▸ button.
- Summer Time: this can be set to be ON or OFF by pressing ◂ / ▸ button.

3)Manual mode: this mode allows you to set the date and the time completely manual.
- Local Date: Use digits and to set current date in the format dd/mm/yy.
- Local Time: use digits and ◂ / ▸ button to set current time in the format hh:mm.

4) Press OK button to save all settings.

System Information

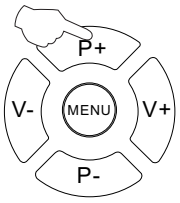
Press OK to enter and in this screen some system information will be displayed.

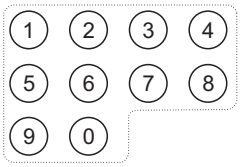
TELETEXT

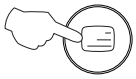
- Teletext is an information system, broadcast by certain channels, which can be read like a newspaper . It also provides subtitles for people with hearing difficulties or those who are unfamiliar with the language in which a particular program is being broadcast (cable networks, satellite channels, etc.).

Note: The teletext buttons could be working even if there is no teletext signal, but there is no teletext display.

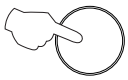
Teletext







TUNE



Teletext functions

To select ″Teletext″ press the TEXT button on the handset. To switch off Teletext, press the button again. ″Note all menu functions are not available in Teletext mode″. Only a few direct button control functions are available in TELETEXT mode, they are:

- Volume adjustment
- Mute function

Page up/down

Use the P+/- buttons to browse next or previous page.

Page number entering

To select a Teletext page, enter the page number using the numeric key pad on the remote control, or use the P+ or P- buttons, or the coloured Fast text buttons.

Mix mode

To view the TV picture while in Text mode press the button, this will superimpose the Teletext data on top of the TV picture. Press this button again to return to Full text.

INDEX

Press the tune button to go to the index page of teletext.

TELETEXT

Teletext

Language change
Pressing the 〉 button will change the Teletext characters between Eastern and Western.

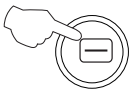
Hold
Pressing the ⊞ button will stop the teletext page automatically updating. This feature is very useful where there are several teletext pages or data on the same page number.

Size
Pressing the ⊞ button changes between full screen top half bottom half full screen. This feature is very useful as it magnifies the image making the characters easier to read.

Reveal
Pressing the ? button will reveal hidden text. This feature is used to reveal information such as answers to Teletext on-line interactive puzzles.

Time
While in normal TV mode only, pressing the button ◴ will display the teletext time in the top right hand corner for a few seconds.

Fast text coloured buttons
Fast text automatically displays the four most commonly used pages that the broadcaster thinks that you may want to choose next. Press the same coloured button on the remote control as the coloured link at the bottom of the teletext page to go directly to that page.



Subcode
Pressing the ⊟ button by entering its 4-digit number to enter a secondary page;

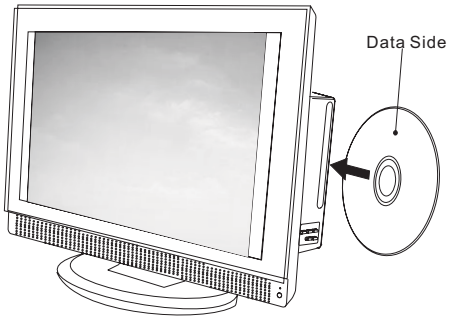
Basic Playback

Preparations

- Press the DTV/DVD button on the remote control to enter the DVD status.

Note: The unit do not allow enter DVD mode(or place a DVD in the disc slot) again after it have just left to avoid any damage of the DVD. Wait for 10 seconds to enter again.

Basic playback



1. Place the DVD in the disc slot as figure above. The disc will be loaded automatically after one to two seconds, then the DVD player reads the DVD and displays the opening menu.（If there is no disc placed on the disc slot in DVD mode, OPEN will display on the screen all the times)
   - There is only one disc size can be loaded in the disc slot .
   - Do not place a disc which is unplayable in this DVD player.
   - Some disc may not playback automatically, you can press PLAY/ENTER button to start playback.
2. Some disc may start playback with a menu, use the cursor button on the remote control to select menu options and press PLAY/ENTER to start, or press digits to select a menu options directly.

Pause playback

1. Press PAUSE/STEP to pause playback (still mode). The sound will be muted during still mode.
2. Press PLAY/ENTER to resume normal playback.

D.CALL

When pressing the D.CALL button repeatedly different OSD indicator will be displayed for different types of disc DVD, CD etc

Stop playback

1. Press STOP ■ button to go to stop mode, the TV screen will show the start-up logo. For some disc the player can recall the location where stopped, such as DVDs and audio CDs.
2. Press ENTER/PLAY to resume playback from the location where playback is stopped.
3. Press STOP twice to stop completely.

Previous and Next

During playback, press PREV ⏮ key can go back to the beginning of this chapter, then each press of this key will skip a chapter till the start of the disc. (note: Disc function may vary depending on disc format)
Each press of NEXT ⏭ key during playback will skip the current chapter and play the next one.

Fast forward and Fast reverse

1. Press FWD ▶▶ to fast forward through the disc. Each time the FWD ▶▶ button is pressed, the fast forward motion speed changes. It would cycle through 2X, 4X, 8X, 16X, 32X and normal.
2. Press PLAY/ENTER to resume normal playback.
3. Press REV ◀◀ to fast reverse through the disc. Each time the REV◀◀ button is pressed, the fast reverse motion speed changes. It would cycle through 2X, 4X, 8X, 16X, 32X and normal.
4. Press PLAY/ENTER to resume normal playback.

Single step playback

1. Press the PAUSE/STEP button to pause the playback.
2. To view the next frame, press the PAUSE/STEP button. Each press of the PAUSE/STEP button advances the film by one frame.

ZOOM

Press this button can zoom enlarge or lessen the picture. Each time pressed the picture times will be change.

In zoom mode press navigation buttons to move the picture displayed on the screen

Advanced Playback

IMPORTANT NOTE:
ALL DESCRIBING FUNCTION IS FOR DVD DISCS. IF YOU PLAY OTHER FORMAT DISC, THE OPERATION AND DISPLAY ON SCREEN MAY DIFFERENT.

SUBTITLE

Press " SUBTITLE ", the screen will display "SUBTITLE 01/XX XXXXX", "01" indicates the ordinal number of this language; "XX" indicates total number of language; "XXXXXX" indicates the language of country. (the number of language depends on disc). This function can select up to 32 languages displayed on screen.

REPEAT

Press REPEAT button multiple times to reach desired play mode:
DVD
Chapter repeat, Title repeat, All repeat
CD
Single-play current track, Repeat One-repeat current track, Repeat Folder-repeat current folder, Folder-play current folder.

REPEAT A-B

Press A-B to mark the start-point, press again to set an end point to complete setting. The selected section A-B will be repeated immediately. Press the Repeat A-B again to cancel this function.

ANGLE

When enjoying sports, concert or theatre, press this key to watch same actions in different angles. (Valid for discs possessing this function. Using a disc recorded in multi-angle you can view the scene from different angles, for example, front, side, whole view and exterior scene.)

D.MENU

Press this key to display root menu, select item according to your preference. (This function will work with a DVD having a multi-layer menu.).

PROGRAM

When playing discs, press " PROGRAM " to enter program mode. Press the digit buttons to select the program number that you want. When finished, move the cursor to select "START" . This will start the program playback. If you want to cancel this function, press " STOP " , then press "PLAY/ENTER" .

SEARCH

Press "SEARCH" once to display the search menu. Use the up/down navigation buttons to select the item you require. Press PLAY/ENTER to confirm (CD press the search button several times to select the item). And then press the numeric buttons or navigation buttons to input the item you require. Press PLAY/ENTER to confirm.

SLOW PLAY

Press SLOW to play a disc in slow forward. Each time the SLOW button is pressed, the slow motion speed changes.
Press PLAY /ENTER to resume normal playback.
Note: This function is invalid for CD .

AUDIO

Press this key can change the audio mode.
such as: Audio 1/2: AC 3 2 CH English
Audio 2/2: AC 3 5.1 CH English
If you play CD disc, press this button can cycle among Mono Left, Mono Right, Mix-Mono and Stereo.

Note: When press this button continuously, you must above 3 seconds interval.

TITLE/PBC

With some DVD discs pressing this key will display the title menu. You can then use the digit buttons to select the item you prefer.

Special Function Playback

JPEG DISC PLAYBACK

Insert a picture CD or JPEG picture CD into the tray and the disc will be loaded automatically. If the disc type can be identified, the player will start showing the pictures one by one (slide show mode).If a navigation menu will be displayed use the navigation buttons to select a file, then press the PLAY/ENTER button.
Each picture in the CD will be displayed consecutively in a slide-show fashion and will be scaled to fit in the whole TV screen. Some slide show transition modes are provided, use "PROGRAM" key to select. Customer can set transition effects for each picture.
To display an image indefinitely, press the "PAUSE" key. To view the next or previous picture, press "NEXT" or "PREV" key. To resume the slide show, press the " PLAY/ENTER" key.
Press the STOP button to preview the photos in a folder. Press navigation buttons to rotate a picture.

SCREEN SAVER FUNCTION

If this unit is idle for 3 minutes, it will go to sleep mode with screen saver on. In this mode, you can press any key on remote control or on front panel to activate the unit.
You can set SCREEN SAVER function to OFF in GENERAL SETUP PAGE of DVD SYSTEM SETUP.

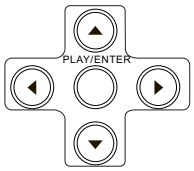
DVD System Setup

General Setup Process

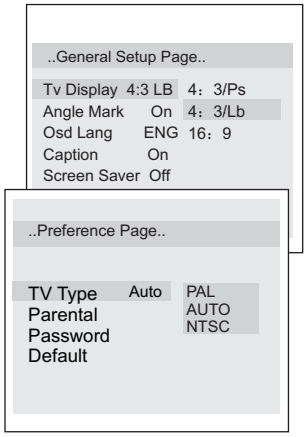
1.Press the SETUP button, the General Setup Page,Preference Page will be displayed in turn.

2.Press ▲ or▼ to select, the item, then press▶ to enter the submenu.

3.Press ▲ or ▼ to select then press PLAY/ENTER to confirm.



4.Press SETUP repeatedly to exit the set-up menus.

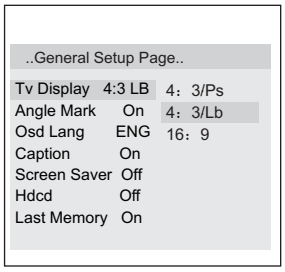


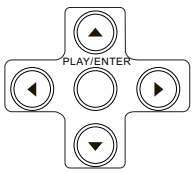
General Setup Page

ASPECT RATIO DESCRIPTION

When using the DVD with the internal TV, select 4：3/LB.

The following information applies only when the DVD output is connected to an external TV.





●4：3/PS (PS = Pan and Scan)
You may select this if you have a normal aspect ratio (4:3) TV, although the NORMAL /LB (letter box) is a more common choice. In PS mode, widescreen material will fill the screen, but at the expense of chopping off extreme left and right edges of the original film picture. For this feature to work, the disc must be specially coded. Such discs are uncommon.

●4：3/LB (LB = Letter Box)
You may select this if you have a normal aspect ratio (4:3) TV. Widescreen material will be shown in pure unaltered form, allowing the entire picture area of the original film to be viewed without any side cropping. Black bars will appear above and below the picture.

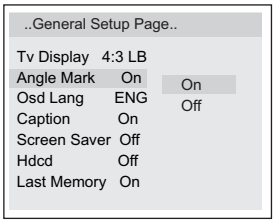
●16：9
You may select this if you have a widescreen (16:9) TV. Back bars may still appear above and below the picture even if using a widescreen TV. This is because some film directors prefer to use ultra widescreen aspect ratios e.g. 2.35:1. This will normally be indicated on the DVD packaging.

DVD System Setup(Continued)

DVD System Setup

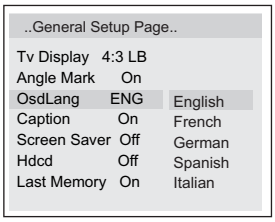
General Setup Page

Angle Mark: Users can select a particular camera angle when playing a DVD which offers multiple angles.
This item allows you to set Angle Mark ON or OFF.

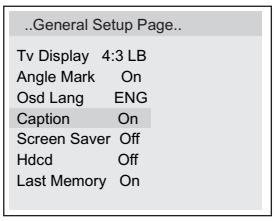


On Screen Display (OSD) Language: Users can select on-screen display language.

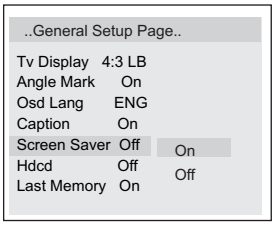
(The languages you can select may differ from different countries or models)



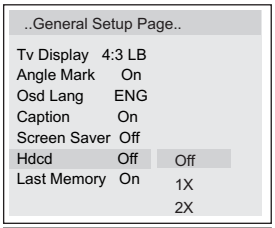
Caption: This function allows you to display or hide the caption.



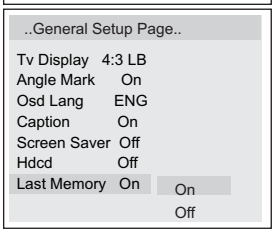
Screen Saver: If the screen saver is on,then there will be an animated picture of DVD on the screen whenever the DVD player is idle for more than 3 minutes .



Hdcd: When default setting is off, it will display CD by reading HDCD, for HDCD playback, please choose 1X or 2X.



Last Memory: Memorize the chapter you have just watched. When last memory is on, if you turn on the DVD again after off it will display from the chapter you watched when you turn off the DVD.



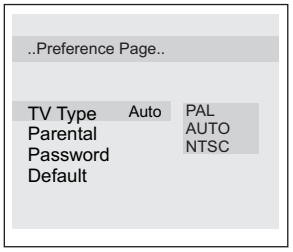
DVD System Setup(Continued)

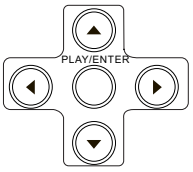
DVD System Setup

Preference Page

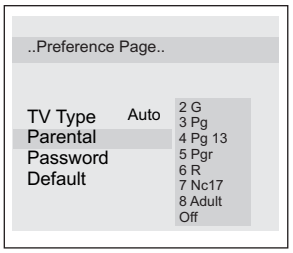
The Preference Page is only available when there is no disc in the player. These settings are applied consistently to all discs which are inserted and played.

TV Type: This player supports different TV output, including MULTI(Auto), NTSC, and PAL systems. Usually please set to MULTI.





Parental: The parental control function works in conjunction with the different censorship classes assigned to DVDs. These classes help to control the types of DVDs that the family watches, There are up to 8 censorship classes for DVDs.



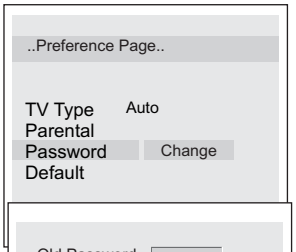
Note:

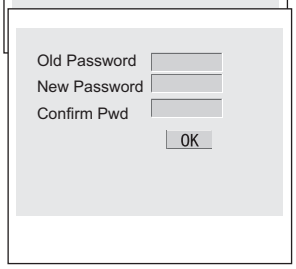
1 To change this setting you must enter your password. (Initial password is 1234)

2 When set to OFF, all discs may be viewed.

Password change:

You can change your password by entering 4 digits. Your must confirm the 4 digits before the new password can be accepted.

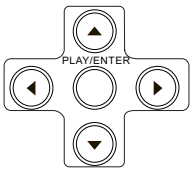




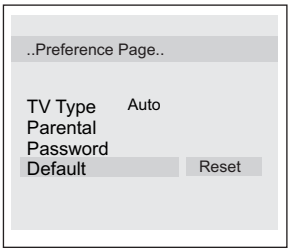
NOTE:If you forget your password or a password is accidentally set enter 1369 as the password. This will enable you to regain control.

DVD System Setup(Continued)

DVD System Setup



Default: Resets all settings (except password and parental lock status) for this DVD player back to the manufacturers original settings. Press ENTER to perform the reset.



Note:
Some functions may not be available depending on the type of disc.

Playable Discs

The following discs can be played:

DISCS	LABEL	CONTENTS	DIMENSION
DVD VIDEO	DVD VIDEO	Audio +Video (moving picture)	12cm
AUDIO CD	COMPACT disc DIGITAL AUDIO	Audio	12cm
JPEG	JPEG	Video(picture)	12cm
KODAK CD	Kodak PICTURE CD COMPATIBLE	Video(picture)	12cm
CD-R	CD•R	Audio or Video (moving picture)	12cm
CD-RW	CD-RW	Audio or Video (moving picture)	12cm
CD+G	CD+G	Audio(picture)	12cm

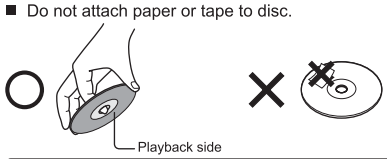
Support discs: DVD, CD-R, CD-RW, HDCD, JPEG, CD+G, Kodak CD , W MA.

- You cannot play discs other than those listed above.
- You cannot play non-standardized discs, even if they may be labeled as above.
- The performance of CD-R or CD-RW disc is depend on the way of disc-burning. In a few cases, their performance may not be very well or even not playable.

Dics Protection and DVD Characteristics

ON HANDLING DISCS

- Do not touch the playback side of the disc.
- Do not attach paper or tape to disc.



ON CLEANING DISCS

- Fingerprints and dust on the disc cause picture and sound deterioration. Wipe the disc from the centre outwards with a soft cloth. Always keep the disc clean.

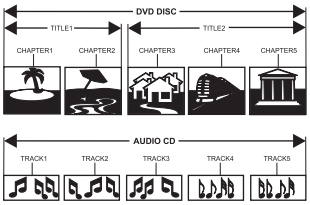
- If you can not wipe off the dust with a soft cloth, wipe the disc lightly with a slightly moistened soft cloth and finish with a dry cloth.
- Do not use any type of solvent such as thinner, benzine, commercially available cleaners or anti-static spray for vinyl Lps. It may damage the disc.

ON STORING DISCS

- Do not store discs in a place subject to direct sunlight or near heat source.
- Do not store discs in place subject to moisture and dust such as a bathroom or near a humidifier.
- Store discs vertically in a case. Stacking or placing object on discs outside of their case may cause warping.

STRUCTURE OF DISC CONTENTS

Normally, DVD discs are divided into titles, and the titles are sub-divided into chapters. Audio CD are divided into tracks.



Each title, chapter, or track is assigned a number, which is called title number, chapter number or track number respectively.
There may be discs that do not have these number.

Compare DVD disc with other discs:

	DVD				LD
Encode method	Digital/MPEG Ⅱ				Analog
Capacity	Single-side single-layer 4.7G	Double-side single-layer 8.5G	Single-side double-layer 9.4G	Double-side double-layer 17G	
Playing Time	133 minutes	242 minutes	266 minutes	484 minutes	Single-side 60 minutes double-side 120 minutes
Disc diameter	12cm				30cm/20cm
Horizontal resolution	More than 500 line				No more than 430 line
Picture proportion	Multiple kinds				One kind
Subtitle	32 kinds				16 kinds at most
Sound quality	48KHz, 96KHz/ 6, 20, 24bit				44.1KHz/ 16bit

Troubleshooting Guide

- To assist in location possible faults use help guide below.

Troubleshooting

No picture, no sound	Verify if the television is properly plugged in. Verify if the television has a proper supplied power source. Verify if electricity is available.
Blank screen	Verify if correct signals are input. Press TV/AV button to change signal input to TV input. Restart the television if power supply is interrupted.
No sound	Press MUTE button and verify if Mute mode is set. Switch to other channel and verify if the same problem happens. Press VOL+ button to see if the problem can be solved.
Poor sound	Verify if sound system is correct. Refer to user's manual for adjustment.
No picture in some channel	Verify if correct channel is selected. Adjust the antenna. Make adjustments by FINE TUNE and MANUAL SEARCH.
No color for some channel program (black and white)	Verify if the same problem exists in other channels. Check out of picture and sound systems. Refer to relative instructions in the Manual for color adjustment.
Spots with some or all pictures	Verify if the antenna is correctly connected. Verify if the antenna is in good condition. Make fine adjustment of channel.
Television out of control	Disconnect the television from power supply and 10 seconds later, connect the television to the power supply. If the problem still exists, contact authorized after-sales service for technical assistance.

Note:

1.If the fault can not be repaired using the above guide consult with your local authorized service center.

2.The TV set must only be repaired by a qualified registered service person. Never attempt to remove the back cover as the TV set has dangerous voltages in side that may cause a fatally or fire.

Specifications

Specifications of the television that you have just purchased may vary from the information in this table due to technical innovations.

Model	L15T11W-A,L15TA11W, L15T11W-C, L15TC11W, L15T12W-A,L15TA12W, L15T12W-C, L15TC12W, LT15T1W ,LT15T1BW, LT15T1WW	L19T11W-A, L19TA11W, L19T11W-C, L19TC11W, L19T12W-A, L19TA12W, L19T12W-C, L19TC12W , LT19T1W,LT19T1BW, LT19T1WW	L22T11W-A, L22TA11W, L22T11W-C, L22TC11W, L22T12W-A, L22TA12W, L22T12W-C, L22TC12W, LT22T1W,LT22T1BW, LT22T1WW
Picture, sound system	**PAL/SECAM-B/G,I,D/K,L,L'**		
Audio output	**⩾1.5W+1.5W**		
External input port	**COMPONENT input PC input S-VIDEO input Audio input SCART Antenna input HDMI input**		
Power requirements	**~150-240V 50/60Hz**		
Power consumption	**⩽50W**	**⩽60W**	**⩽70W**
Temperature	**Working:5℃~35℃ Storage:-15℃~45℃**		
Humidity	**Working:20%~80% Storage:5%~90%**		
Accessories	**Remote control Batteries Owner's manual Audio cable**		

● **Note:**
All specifications are subject to change without notice.
All quality are approximate value.